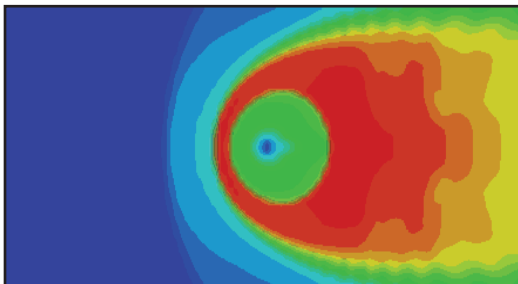
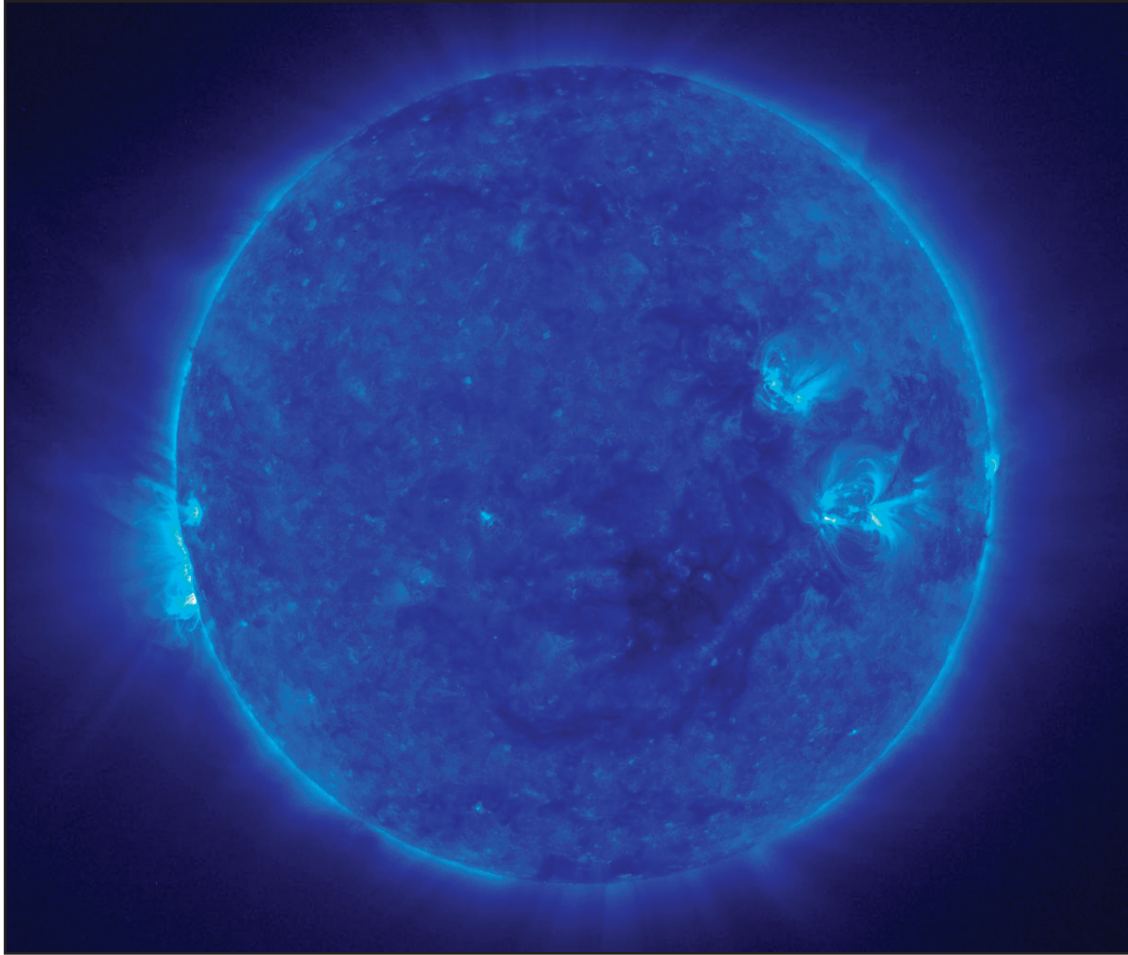




...the first step in
solar cell production



SOLAR SYSTEMS



Wet Processes for Thin-Film Solar Cell Production

Precision Process specializes in custom-made wet chemical systems ideal for the manufacturing of thin-film photovoltaic cells.

With growing demand for solar energy, thin-film solar cells offer added versatility at lower production costs. Our wet process based systems help manufacturers reduce costs and increase productivity.

From R&D to Full Production

Our systems are designed for both R&D as well as high volume production.

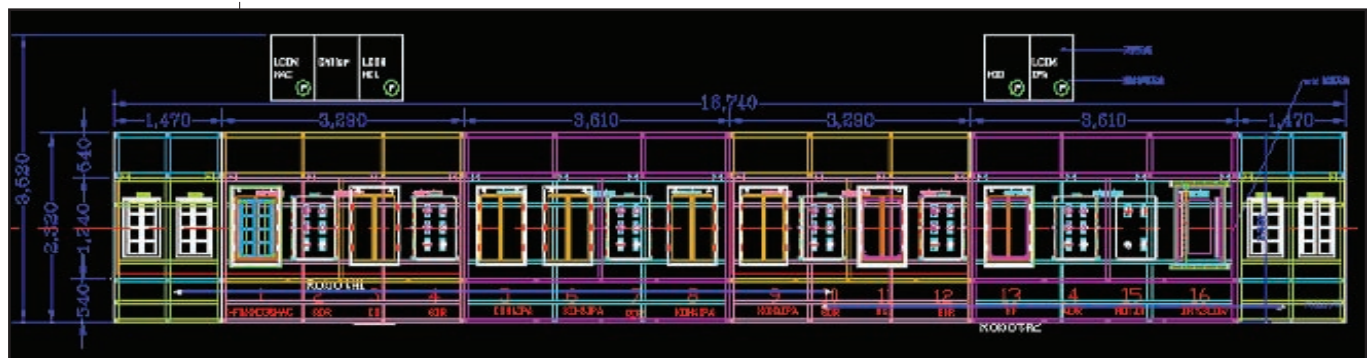
Our goal is to provide customers with a competitive advantage through custom-made systems that enable a rapid entry into the booming thin-film solar cell market. With systems installed and operational in real-world manufacturing facilities, we have proven know-how to help customers move ahead in this emerging field.

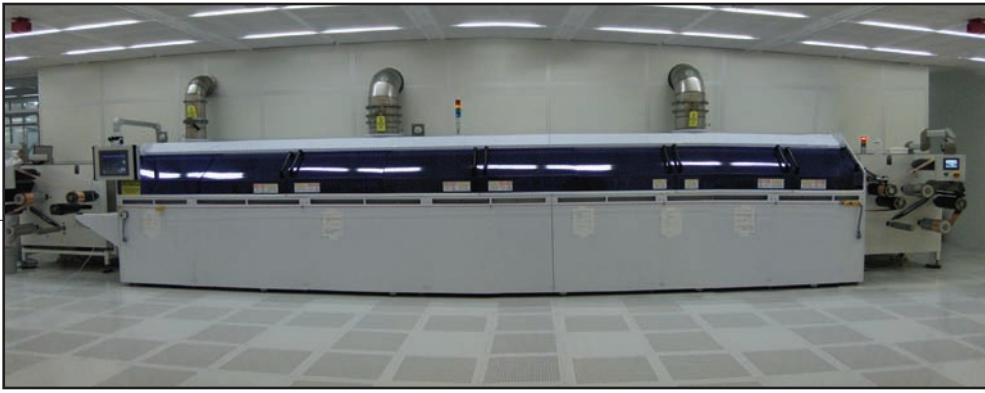


Reducing Cost Per Watt

The real challenge for solar cell producers lies in the long-term reduction of the costs for solar power.

Precision Process offers wet process systems for roll to roll or discrete substrates. Whether electrolytic or electroless deposition of active layers, or inter connect technology, Precision Process has the solution to your "Green Tech" manufacturing needs.





Design - Manufacturing - On-Site Installation Expertise

Our experienced design team has a proven track record of translating customer requirements into operational cost effective solutions. Our design philosophy helps reduce start-up time and expansion costs resulting in improved performance. Our manufacturing approach leverages cost saving modular designs, application specific configurations, turn-key project capabilities, and customer-centric project management teams.

Precision Process also offers a wide range of start-up and maintenance options. Our installation teams are supported by engineers located in our USA, Taiwan and mainland China facilities. We will work with your site services team to bring your new wet process system on-line so that you can concentrate on your core competencies.

Wet Processes for Solar Substrates and Semiconductors

Precision Process provides a variety of equipment for electroplating, electroless plating, etching and other wet processes for semiconductor and solar substrates.

The Excellite plating tool is designed for production applications. This tool series has the smallest, most efficient layout design in the industry. It uses a three-axis automated wafer transport system that allows all chemical processes in the rear and all rinsing in the front. This design results in a footprint half the length of conventional linear systems, saving valuable clean room floor space. The Excellite transporter is clean, fast, smooth, and accurate in positioning fragile wafers and substrates. The Excellite is available in single or multiple robot configurations.

Excellite Tool Features:

- Automatic or manual operations
- 50-300 mm wafer capability
- Solar cell texturing and saw cut removal



Our Strategic Partnership

Process Partners International is the strategic partnership of Precision Process USA and Process Advanced Technology China, offering world class design and engineering with manufacturing capabilities in USA, Taiwan and China.

We offer clean room assembly facilities in Niagara Falls, Taipei and China and have completed numerous successful projects worldwide.

Learn more at:

www.processpartnersinternational.com





Global Infrastructure

Precision Process is a global leader in solutions for solar manufacturing technology. Our portfolio includes plating equipment, plating services, and software for the production of semiconductor chips, flat screen monitors, solar cells, flexible electronics, and energy-efficient glass.

Our international equipment manufacturing teams and installation options make Precision Process the ideal partner for your technology advancement.

Extensive Experience Benefiting a Growing and Emerging Market

Offering years of electroplating experience, Precision Process can help bring your ideas to the growing solar power market. We can cost effectively build prototype equipment for the production of electroplated solar cells; allowing deeper discovery prior to full scale production. We can then develop reliable turnkey electroplating systems for your production environment with minimal or no startup issues.

For the Solar Power Industry Precision Process Provides:

- Experience with electrolytic plating of Cadmium Telluride solar cells
- Experience with electrolytic deposition of thin-film CIGS solar cells, with high uniformity
- Turnkey equipment systems
- Quick to build electroplating equipment that reduces lead times
- Competitive prices for production, R&D, and laboratory facilities
- Development of prototype electroplating equipment
- Finely tuned roll-to-roll material handling that allows transport of thin-film substrates at precise tensions

- CLEANING - ETCHING - ELECTROPLATING - DRYING -

Our products offer the highest possible performance in the solar cell production chain.


Solar Wafer Processing

A complete network of post-cutting cleaning devices and pre-cleaning.

Solar Cell Processing

Complete etching and cleaning processes for in-line and batch solar cell production; from saw damage etching, texturing, to oxide etching.

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Precision Process and its sister company **Precious Plate Inc.** offer systems and services for wet chemical applications in the semiconductor, photovoltaic, and medical isolation arena.

Precious Plate Inc. offers a variety of services key to the Solar and Photovoltaic industry including cleaning and/or plating of continuous solar substrates.

www.preciousplate.com

